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(45) **Date of Patent:** Sep. 29, 2015

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US 2012/0240326 A1 Sep. 27, 2012

Related U.S. Application Data

(63) Continuation-in-part of application No. 12/831,934, filed on Aug. 12, 2010, now abandoned.

(51) **Int. Cl.**
A47K 3/00 (2006.01)
A47K 3/32 (2006.01)

(52) **U.S. Cl.**
CPC .. *A47K 3/325* (2013.01); *A47K 3/00* (2013.01)

(58) **Field of Classification Search**
CPC A47K 3/284
USPC 4/596, 612
See application file for complete search history.

(57) **ABSTRACT**

A portable shower device comprising a shower pan having shower poles that extend a curtain beyond the perimeter of the shower pan and curtain poles. The poles lock into an extended position. The curtain is tapered conforming with the extended pole shape. The pan includes a pump powered from the self-contained power source. The shower can include a platform and a chair.

19 Claims, 10 Drawing Sheets



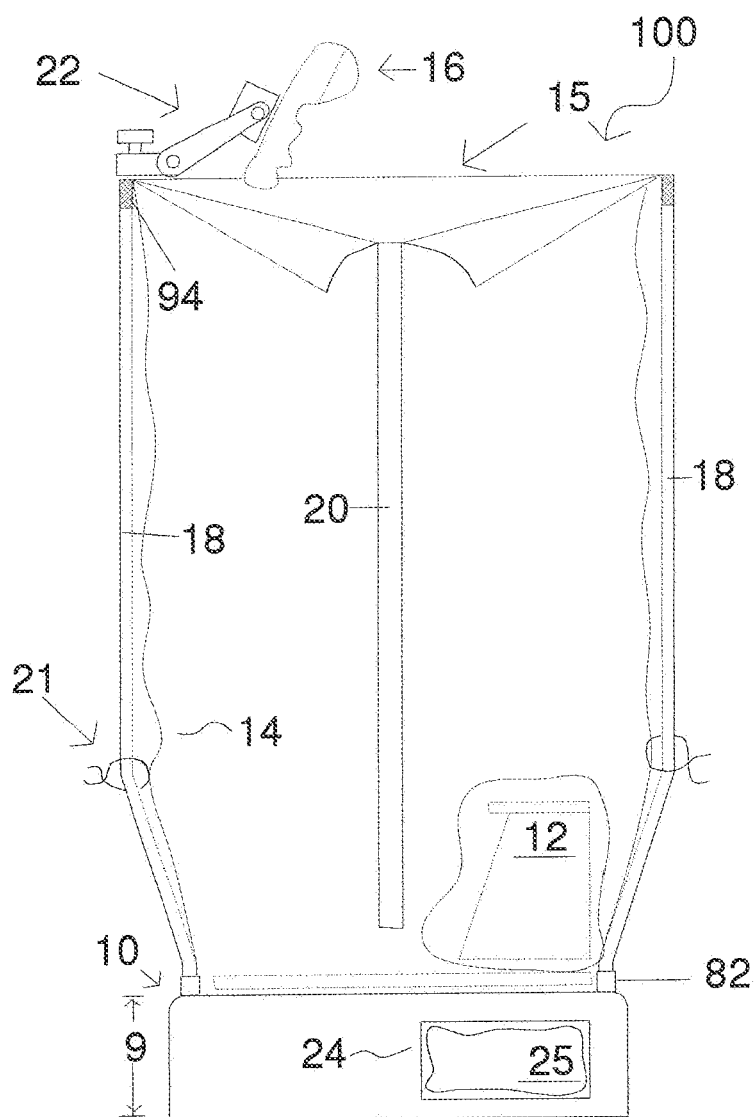


Fig. 1-Side View

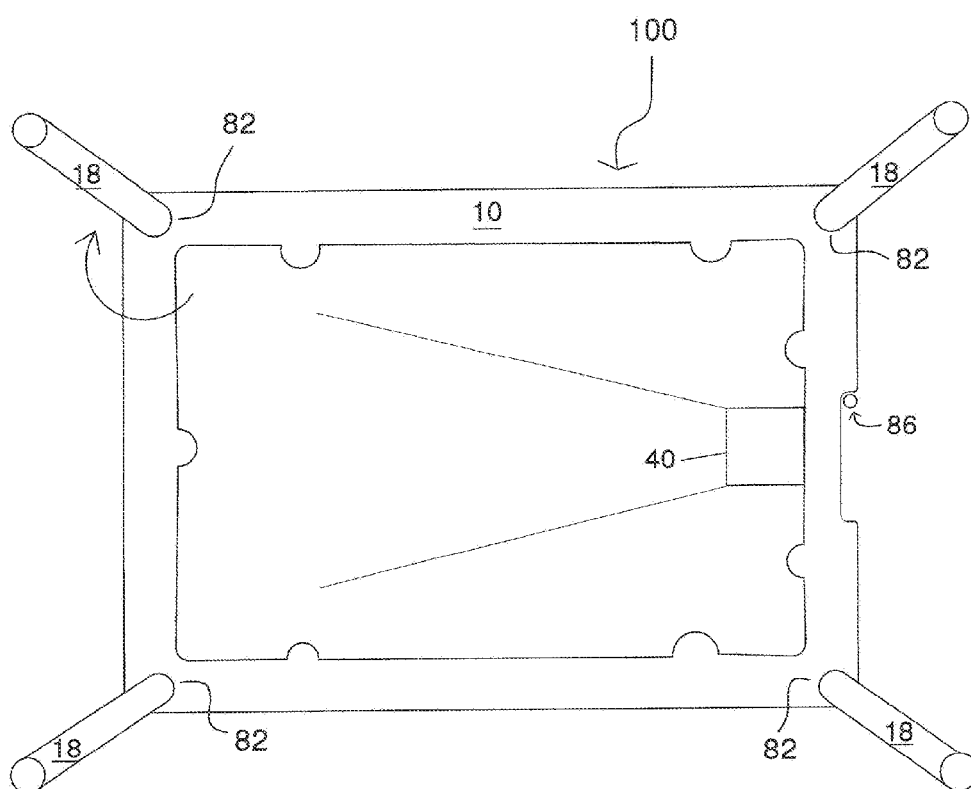


Fig. 2 A Top View Shower-Open No Curtain

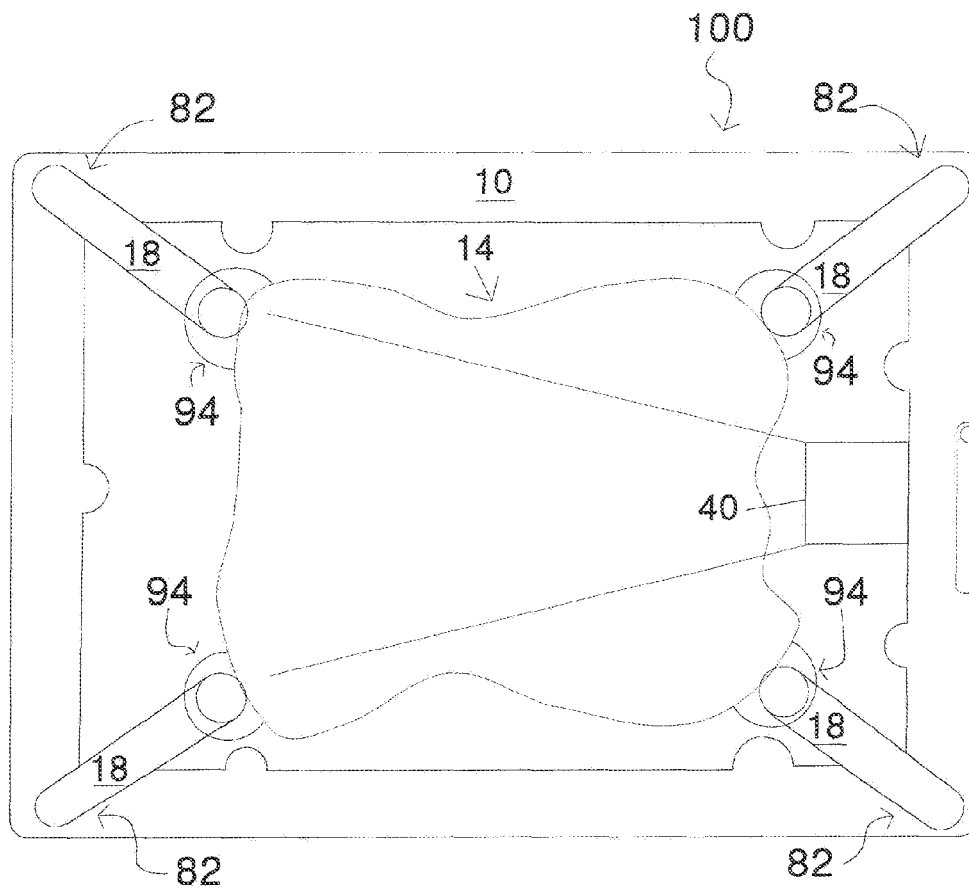


Fig. 2B

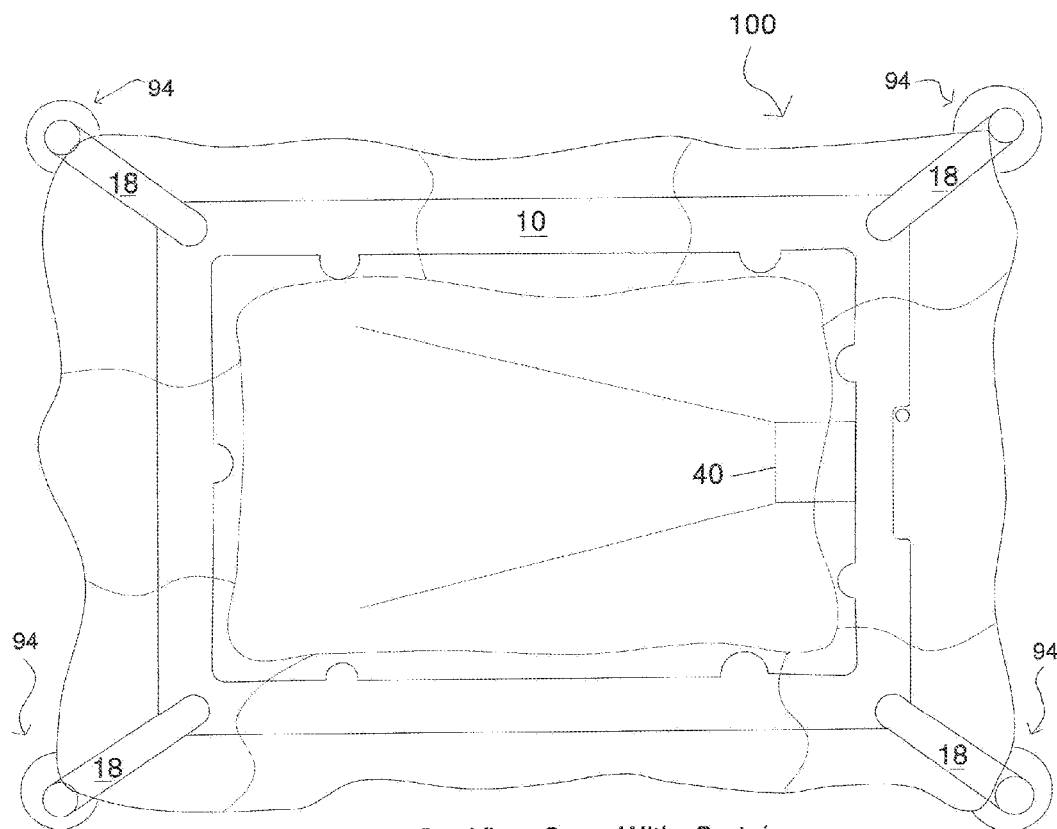


Fig. 2 C Top View-Open With Curtain

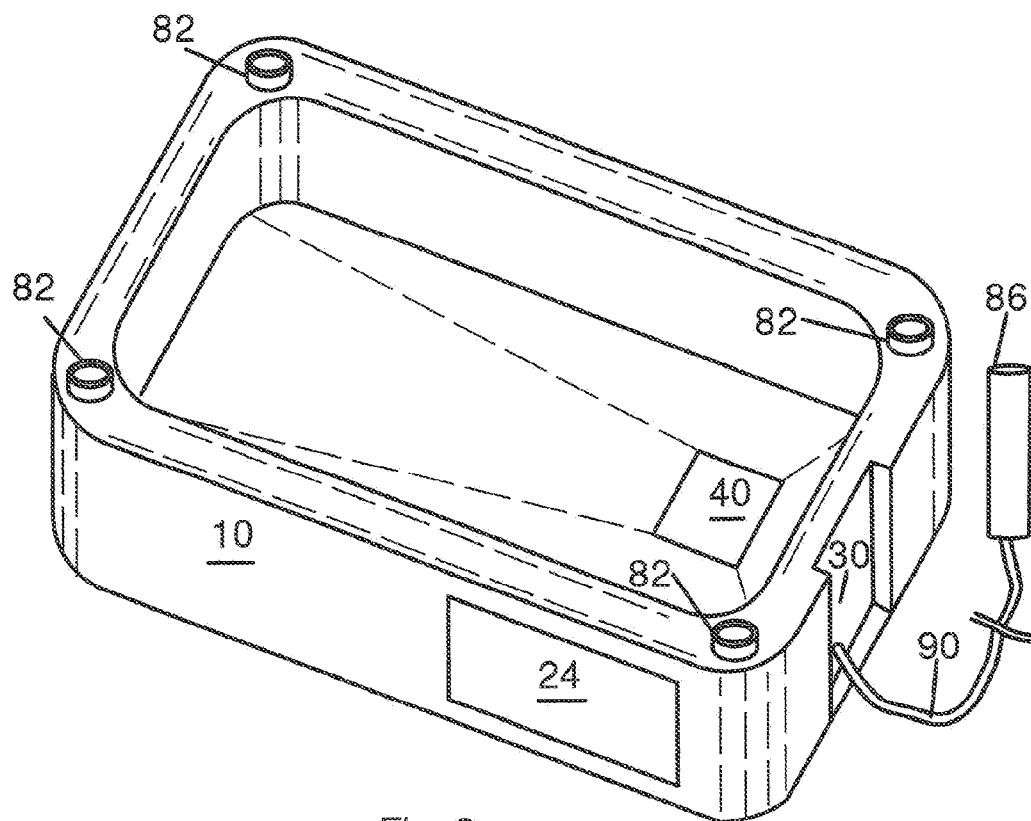


Fig. 3

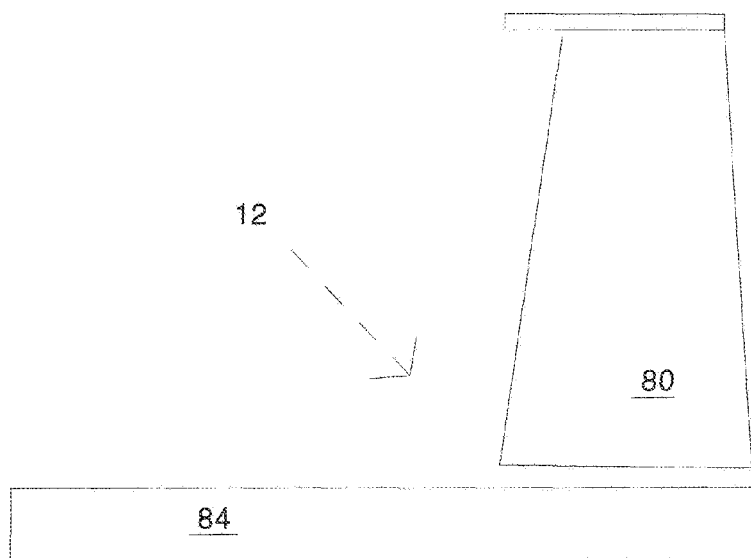


Fig. 4

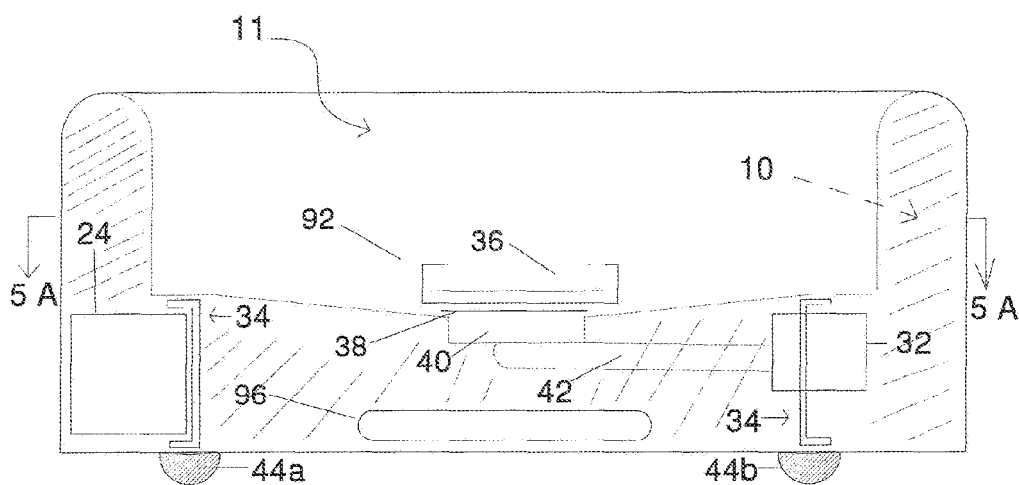


Fig. 5

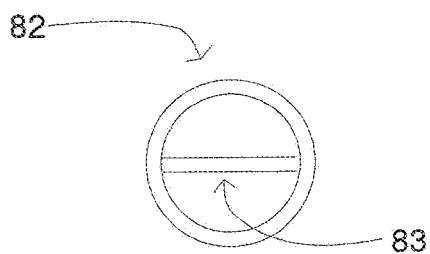


Fig. 6 B

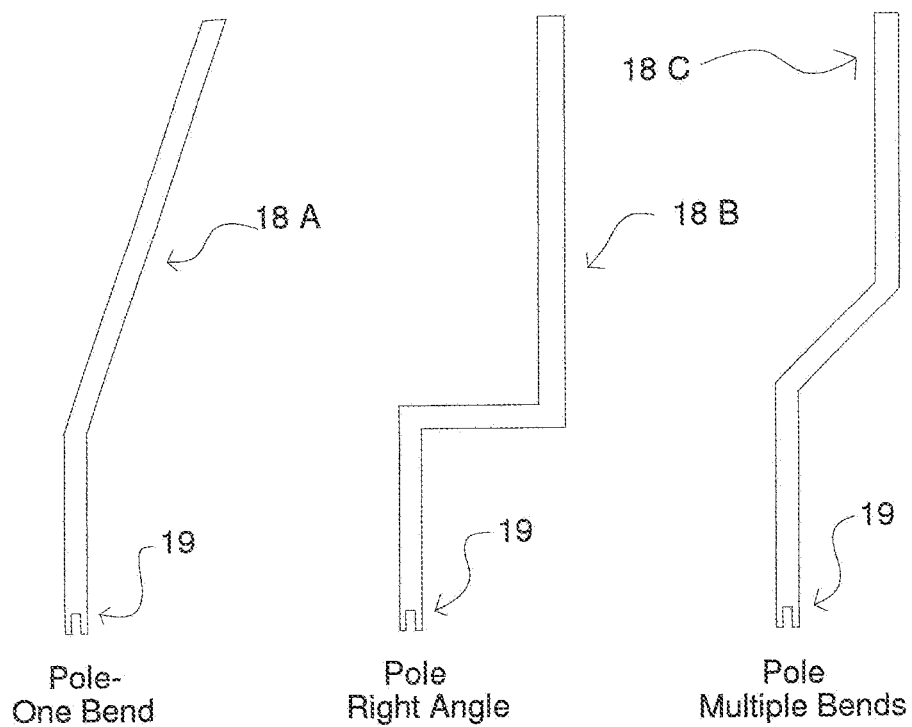


Fig. 6 A

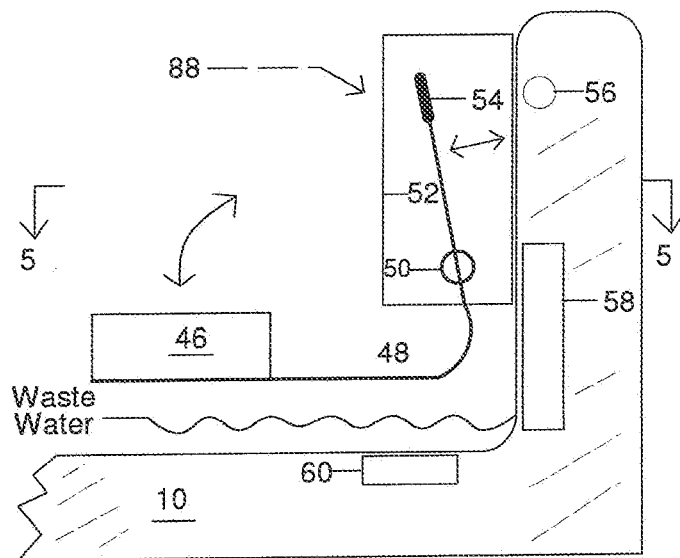


Fig. 8

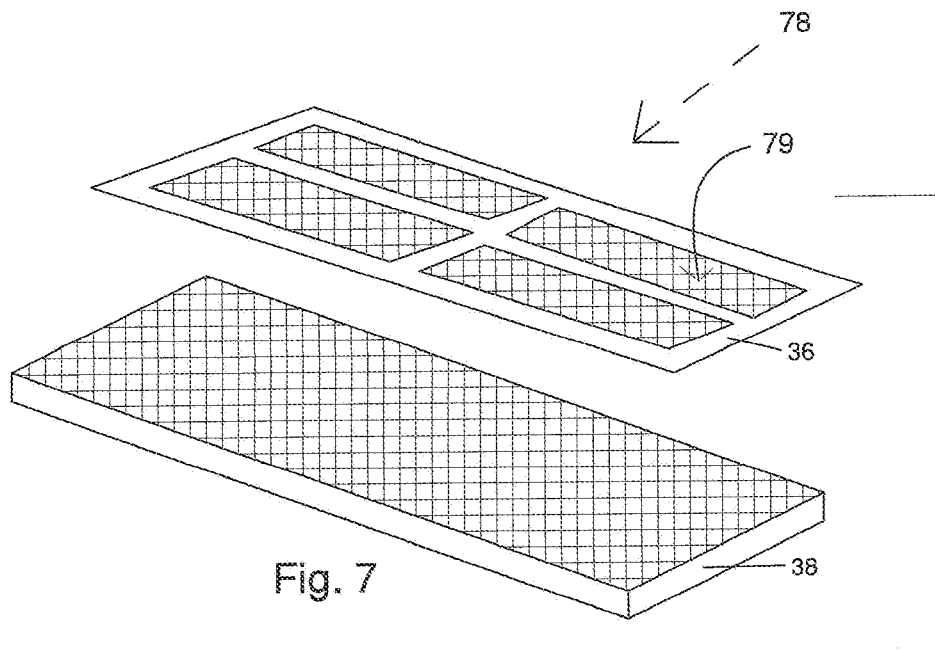
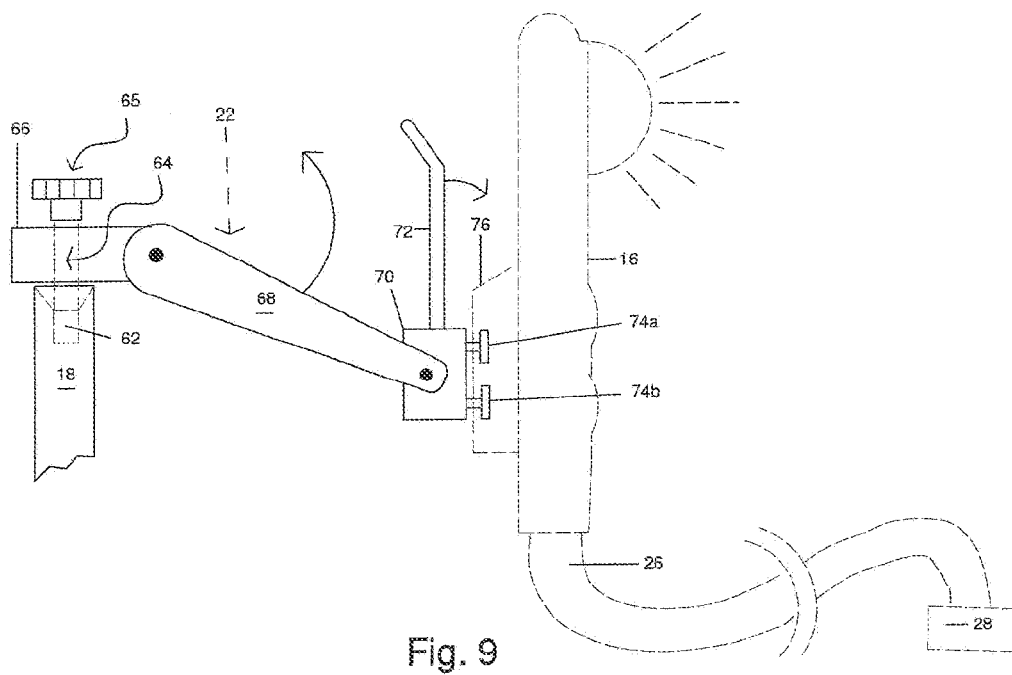
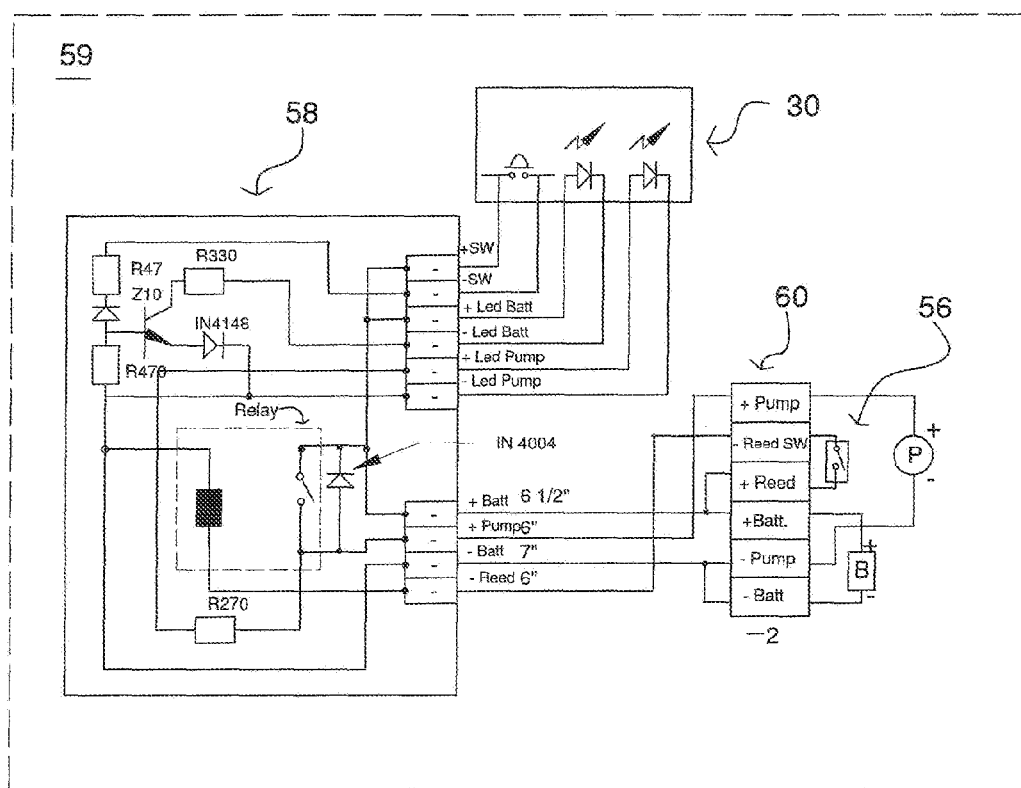


Fig. 7





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PORTABLE FREE STANDING SHOWER WITH EXPANDABLE ENCLOSURE

CROSS REFERENCE TO OTHER APPLICATIONS

This application is a continuation-in-part of the application entitled "PORTABLE FREE STANDING SHOWER WITH EXPANDABLE ENCLOSURE" Ser. No. 12/831,934 filed Aug. 12, 2010 now abandoned. The application Ser. No. 12/831,934 is herein fully incorporated by reference.

FIELD OF INVENTION

The present invention relates to portable showers particularly for use indoors and for a person that may not be able to remain standing while showering. These people can include the elderly or disable people. Further, the present invention relates to the use of a portable shower in buildings that do not have showers available and need to utilize a small bathroom or wash room having hot and cold water.

BACKGROUND OF THE INVENTION

Prior art portable showers are designed for use outdoors where the wastewater effluent is disposed of by gravity and typically flows out onto the ground. The showers are not designed for use in small spaces and configured to move through the doorways of residential and commercial building. These showers are designed for recreational camping or outdoor use. In some prior art showers, hot water is either not provided or provided with solar power, or propane gas heaters.

What is needed is a portable shower that is usable in a home, office, or commercial building, is easy and quick to move and assemble, can be slide through a doorway, and makes use of the home or commercial building's utilities. Further, what is needed is a portable shower that is easy for the elderly or disabled to get into, out of and provides a place for a person to sit.

SUMMARY OF THE INVENTION

The portable shower device is comprised of a shower pan, curtain poles and a tapered shower curtain. The shower device is configured to be easily stored and moved through house doorways. The pan can be twenty five inches wide or less and the poles are configured to rotate from a retracted position to an extended position. In an extended position the poles and shower curtain coupled to the poles provide a larger area for bathing by extending the shower curtain beyond the perimeter of the shower pan. In a retracted position the poles rotate inward and thus require less storage area and allow it to be slid through a doorway. The shower device includes a curtain. Preferably the curtain is wider at the top and narrower at the bottom.

The shower device can include a battery power pump connected to the collection basin. The pump is configured to remove washing effluent from the basin or sump. The pump is designed to pump the wastewater effluent up a height at a pump flow rate. The shower system can include a pump control unit wherein the unit activates the pump upon receiving an activation indication and can include a shower head coupled to a curtain pole. The shower head can have a flow rate is less than or equal to the pump flow rate.

In some embodiments, the shower device includes a sump. The shower curtain can be is made of antimicrobial material

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and is attachable to the poles with pockets. In other embodiments, the pan can be four to eight inches high.

The shower device can include a platform configured to fit within the collection basin and configured to distribute weight on the platform to the perimeter of the collection basin. The platform can have a seat removably coupled to the platform. In some embodiments, the seat comprises a back panel, two side panels pivotally connected to the back panel, and a top panel. The back panel and two side panels are pivotally connected to the back panel where the top panel that can be supported by the two side panels, and wherein the seat is configured to fold flat within the basin when the two side panels and top panel is pivoted adjacent to the back panel.

In some embodiments, the device include a float mechanism coupled to either the basin or the sump and is configured to communicate an activation indication to a pump control unit. The float is configured to provide an activation indication when the water reaches a level in the basin or sump. In one embodiment the means for communicating an activation indication is by a magnet that moves into a position that activates a reed switch which generates the activation indication. The float mechanism can include a float, an arm, and a magnet where the water level will cause the arm to move the magnet adjacent to or in proximity of the reed switch. The arm can be in an L-shape.

The shower device can include a shower head holder attachable to a pole where the shower head is adjustable in three directions. In one direction the shower head rotates in the horizontal plane. An arm provides for the shower head to be adjusted in the vertical direction, and third privet provides for the shower head to be angled in the vertical direction.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 shows a side view of the portable shower device, including a shower pan with shower curtain, shower poles, shower head holder, and seat.

FIG. 2A shows a top view of a shower pan with support poles in the extended position.

FIG. 2B shows a top view with the poles retracted and shower curtain attached.

FIG. 2C shows a top view with the poles extended and shower curtain attached.

FIG. 3 shows a shower pan in perspective view showing four receptacles for curtain support poles.

FIG. 4 shows a platform with seat in side view.

FIG. 5 shows a shower pan with gliders, pump, sump, screen, filter and battery in cross section view.

FIG. 6A shows different pole configurations.

FIG. 6B shows a pole receptacle with a locking pin.

FIG. 7 shows a sump drain screen with a removable, disposable filter above it.

FIG. 8 shows a float mechanism coupled to the inside of the pan in cross section view.

FIG. 9 shows a shower head holder with a commercially available shower head, attached.

FIG. 10 shows a printed circuit board (PCB) connected to a power supply, terminal block and a front panel.

DETAILED DESCRIPTION OF THE INVENTION

Drawings--Reference Numerals

- 10 shower pan
- 11 shower basin

Drawings--Reference Numerals

12 seat assembly
 14 curtain
 15 enclosure
 16 shower head
 18 curtain support pole
 18A, B, C alternative pole shapes
 20 zipper
 21 curtain tie
 22 shower head holder
 24 battery compartment
 25 battery
 26 shower head, hose
 28 shower head hose, faucet attachment
 30 front panel with LEDs
 32 water pump
 34 metal support
 36 filter, removable
 38 sump, screen
 40 sump
 42 sump, drain hose
 44 gliders, a, b
 46 float
 48 float, lever
 50 float lever, pivot
 52 float mechanism, housing
 54 magnet
 56 reed switch
 58 printed circuit board
 59 control electronics
 60 terminal block
 62 nut, embedded in support pole
 64 threaded rod
 65 knob
 66 shower head holder, housing
 68 shower head holder, pivoting lever
 70 shower head holder, rivet block
 72 shower head holder, handle
 74 shower head holder, block, rivet a, b
 76 shower head to holder, attachment clip
 78 sump screen-filter assembly
 79 filter screen mesh
 80 seat
 82 receptacle
 83 pin
 84 platform
 86 discharge tube weighted
 88 float mechanism
 90 discharge hose
 92 removable filter cage
 94 curtain, pocket
 96 discharge hose, housing

The portable shower device **100** is comprised of shower pan **10** that includes a self-powered means for emptying effluent from a basin **11**, shower poles **18**, a platform **84**, and shower curtain **14**. Optionally, the portable shower device **100** can include a shower head **16**, a shower head retention system **22**, an attachable seat **12**, and a wastewater effluent discharge tube **90** having a weighted discharge end **86**.

One embodiment of the shower device **100** is illustrated in FIG. **1** (side view), FIG. **2A**, **2B**, **2C** (top views), FIG. **6** (perspective view), and FIG. **5** (cross section). The shower pan **10** is configured with a low voltage pump **32**, a low voltage power source **25** within a pan **10** integrated compartment **24**, receptacles **82** for receiving and securing the shower poles **18**, and a float mechanism **88** that generates an activation and deactivation indication enabling and disabling the pump **32**. The pan **10** forms a basin **11** and optionally can have a sump **40** coupled to bottom of the pan **10**. Preferably the basin **11** is designed to slope down to a low point or the sump **40** where it is connected to a pump **32**.

The pan **10** is preferably made from a light weight, easy to clean, and easy to sanitize material. The pan material can

include but is not limited to plastic, fiberglass, resins, stainless steel, aluminum and other formable metals. In one embodiment the shower pan **10** is made of PVC (polyvinyl chloride) and is thermo vacuum formed over a male mold. The shower pan **10** can also be made with other heat deformable plastic materials. Preferably the pan **10** is light weight to promote portability and readily being able to slide around.

Further, the pan **10** is configured to accept a platform **84** that transfers the weight of a standing or sitting person to the outer perimeter of the basin **11** and such that the force of the platform **84** is transferred through the pan **10** to the floor. Preferably, the pan **10** includes metal braces **34** along two sides of the pan **10** and collocated along the inside points of the basin **11** where the platform **84** would transfer the weight of a person to the pan **10**. This design limits that amount of reinforcement needed across the bottom of the pan **10** and thus reduces its weight, and enhances portability.

The pan height 9-FIG. **1** is designed to be low enough so that an elderly person will not have difficulty stepping into the pan **10**. Preferably, the pan height **9** is between four inches and eight inches. Preferably the shape of the pan **10** is a rectangular with rounded corners but other shapes are contemplated including but not limited to a square pan, and a pan with unrounded corners, a round pan, and a tapered pan.

The pan **10** can sit on two or more gliders **44**-FIG. **5**. The gliders can be made of a material having high lubricity such as Nylon. These gliders **44** can be aligned to be parallel with the longer side of the shower pan **10**.

The pan **10** is configured with a compartment **24** for the power source **25**. Preferably the power source **25** is one or more lantern batteries **25** but batteries of other types and sizes are contemplated including but not limited to rechargeable batteries. Further, the power source can be supplied from a wall power plug. However, a battery power source **25** has the advantage of eliminating the possibility of electrical shock associated with high voltage and trip issues associated with power cords. Preferably, the battery compartment **24** is configured such that when a battery is installed, any rotational position or direction provides the correct battery polarity to the pump **32** and the control electronics **59**.

The pan **10** is also configured with a pump **32** and the associated control electronics **59**. The pump **32** is connected with the lowest point in the basin **11** or sump **40** by a hose **42**, pipe, or channel. Further, the sump **30** can be configured with a removable filter.

Referring to FIG. **5**, a cross sectional view of the pan **10** is shown that cuts across the sump **40** and removable filter housing **92**. Within the filter housing **92** is a removable filter screen **36** that can be removed from the filter housing **92** for cleaning and replacement. A sump screen **38** is placed behind the removable filter housing **92** to catch any large items and prevent them from entering the pump **32**.

The pan **10** contains three or more receptacles **82** for the poles. Preferably there are four receptacles **82** at the corners of a rectangular pan. Preferably the receptacles **82** are built into the pan **10** structure and are flush with the top of the pan **10**. However, the receptacles **82** can extend above the edge of the pan **10**. Additionally, the invention contemplates the receptacles **82** being attached to the outside of the pan **10** or inside the basin **11**.

The receptacles **84** preferably have a means for locking the poles **18** in a position where the top of the pole **18** extends past the outer perimeter of the pan **10**. The means for locking can include a frictional fit between the pole **18** and the receptacle **82**. The friction can be provided by a taper at the end of the pole and a tapered receptacle. A clamp can be used to apply friction coupling the pole **18** to the receptacle **82**. Another

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means can include a pin that is inserted through the receptacle **82** and through the pole locking the two together. A further means for locking includes having a threaded pole **18** and threaded receptacle **82** that locks with the pan **82** when screwed together.

Preferably, the pole has a slot **19** on the end configured to connect with the receptacle **82**. The pan receptacle **82** has a pin **83** that transects the receptacle **82** in the horizontal plane. The pole slot **19** is wider than the pin **83**. When the pole **18** is inserted into the receptacle **82** and rotated to an extended position, the pole slot **19** will drop over the pin **83** and locks the pole **18** into position. When the pole **18** is to be unlocked, the pole **18** is lifted to clear the pin **83** and rotated to a retracted position.

The pan **20** can include high lubricity gliders **44** on the bottom to make it easy to slide in place and to be easily removed after use. This present embodiment overcomes the shortcomings of the prior art in that the portable shower is easy to slide in place while the poles **18** a curtain **14** are retracted by rotating the poles **18** to a position over the pan **10** and then extended for use. It is also relatively inexpensive compared to prior art. The shower device **100** has a seat that makes it stable and comfortable. This seat can be dismantled so that the entire shower can be easily transported in a small car or stored vertically, using very little space. The shower device **100** is sufficiently small so that it can be slid into a very narrow doorway, such as an office restroom. This same embodiment can be used as a portable sauna or steam room by adding the appropriate heating equipment. A pet washing station would be another use of the portable shower. Another use for this easily foldable and slide able shower is for hazardous material wash down.

Turning attention to FIG. 2A, a top view of the shower device **100** is shown without the shower curtain **14** attached. In this embodiment, the pan **10** is shown with four poles **18** attached. Each pole **18** is positioned in the extended position where the top of the pole **18** extends beyond the outer perimeter of the pan **10**. This extension is provided by the pole **18** having one or more bends or angles along the length of the pole **18**. The basin **11** can be sloped to funnel down to a low point or sump **40**.

Turning attention to FIG. 2B, a top view of the shower device **100** is shown with the shower curtain **14** attached by pockets **94** attached to the top of the shower curtain **14**. In this embodiment, the pan **10** is shown with four poles **18**. The each pole **18** is positioned in the retracted position where the top of the poles **18** are over the basin **11** area.

Turning attention to FIG. 2C, a top view of the shower device **100** is shown with the shower curtain **14** attached. The view assumes a transparent curtain where the pan **10** and poles **18** can be seen. The curtain **14** is shown as being flared, wider at the top and narrower at the bottom. In this embodiment, the pan **10** is shown with four poles **18**. The poles are positioned in the extended position where the top of the poles **18** extend beyond the perimeter of the pan **10**. The curtain **14** can be flared outward by being coupled to the poles **18** with the pockets **94** and curtain ties **21**-FIG. 1.

Referring to FIG. 6, several embodiments of the shower enclosure poles **18A**, **18B**, and **18C** are shown. These different pole embodiments can be used for each shower pole **18** as shown in FIG. 1. The poles **18**, **18A**, **18B**, and **18C** are designed so that when in a retracted position, the poles **18** fit within the perimeter of the pan **10** and thereby allow for the shower to be slid or carried through a doorway and not occupy excessive storage space. When the different embodiments of the poles **18A**, **18B**, **18C** are in an extended position, the top

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of the poles **18** extend beyond the perimeter of the pan **10** and thereby provide a larger enclosure showering area.

When the pole is in the extended position, a device locks the pole **18** into position. As shown in FIG. 6, the pole **18** has a vertical slot **19** at the base of the poles that is designed to drop over a pin **83** in the receptacle **82**-FIG. 1 in the shower pan **10**-FIG. 1. However, other locking means are contemplated by the invention including but not limited to pressure fittings, tapered poles and receptacles, threaded poles, and a pin that engage a hole in the bottom of the pole.

A side view of the curtain is shown in FIG. 1. The curtain can be attached after a person is in the shower pan **10** and sitting on the seat **12**. Pockets **94** coupled to the curtain by sliding over the top of each pole **18**. Alternatively, the curtain **14** can be preinstalled. A closeable opening **20** along the one side of the curtain **14** is opened to allow a person to enter the shower device **100**-FIG. 1. The curtain closure **20** can open part way or all the way down the side of the curtain **14**. The curtain closure **20** can include but is not limited to snaps, Velcro, a waterproof zipper and a zipper.

The shower curtain **14** is open at the top and open at the bottom when the curtain closure **20** is closed. Preferably the curtain **14** is tapered being wider at the top and narrower at the bottom however a curtain **14** that is not tapered is contemplated by the invention. Preferably, the bottom perimeter of the curtain **14** is at least equal to the pan **10** perimeter.

The curtain **14** can include attachment means **21** for securing the curtain **14** to the pole **18**. The attachment means **21** can include but are not limited to pockets **94**, hooks, snaps, and ties attached to the curtain **14**. Preferable the attachment means includes a flexible tie **21** coupled to the curtain **14**.

Seat **80** attaches to the platform **84** in FIG. 4. The batteries are connected to water pump **32**, printed circuit board (PCB) **58** and front panel light emitting diodes (LED) **30**. Power can be supplied in other ways, including a 120-volt transformer delivering 12 volts. A 120 volt water pump can also be used with standard house voltage.

Referring to FIG. 9, a shower head holder **22**, attached to the shower device **100** by the curtain pole **18** is shown. The shower head holder **22** is attached to any one of the four curtain poles **18**. In one embodiment, an embedded nut **62** in the pole **18** attaches the shower housing **66** to the pole **18** by a threaded bolt **64**. The bolt **64** can include a knob **65** to ease the attachment of the shower head holder **22** to the pole **18**. Further, by loosening the bolt **64**, a shower assembly **22** can be rotated, and locked in the horizontal plane.

The shower housing **66** is coupled to an arm **68** that is rotationally coupled to the shower housing **68**. Preferable the rotational coupling includes resistance to movement such that the arm **68** will stay in position when moved and while supporting a rivet block **70**, a handle **75**, the shower head **16**, and an attached hose **26**. The rotation of the arm **68** provides for positioning the height of the shower head **16**.

The rivet block **70** is rotationally coupled to the arm **68**. The rotational coupling provides for rotation in the vertical plane and allows for the adjustment of the angle at which water is output from the shower head **16**. Attached to the rivet block **70** can be a handle **72** to help adjust the angle of the shower head **16**. The rivet block **70** can include one or more rivets **74a**, **74b**. These rivets **74a**, **74b** are designed to couple with a shower clip **76**.

The shower device **100** can include a shower head **16**. The shower head **16** can be attached to shower head holder **22** using a shower head attachment clip **76**-FIG. 6. Other means of holding and positioning the shower head are contemplated including but not limited to Velcro, clips, shelves, and hooks (not shown) on a curtain pole **18** or a pocket (not shown)

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incorporated into the shower curtain. The shower head **16** is coupled to a hose **26** that is configured to provide water the shower head **16**. The shower head hose **26** attaches to a faucet that can provide hot and cold water. The hose **26** couples to a faucet by threaded adaptor **28**. Preferably the shower head **16** is selected or designed to deliver water at a rate no faster than the pump **32**-FIG. **5** can remove.

One embodiment of a water level detection and activation indication system is shown in FIG. **8**. The level detection device **88** can be housed in a slide-in bracket (not shown) located on the inside pan **10** wall in the basin **11**. Preferable, the water level detection device **88** is located behind front panel **30** FIG. **2A** to minimize the wiring. Electronic or optical sensors are typically used to gage water level. In this embodiment, a reed switch **56** activates by a magnet **54** moving in proximity to the reed switch **56**. This design eliminates the need to cut through the pan **10** wall for other water level detection systems.

The level detection device **88** includes a float **46**, a lever arm **48**, a pivot **50**, a magnet **54**, and a housing **52**. As the water rises, the float **46** rises. This causes the lever arm **48** to turn around the pivot **50**. As the lever **48** pivots, the magnet **54** gets closer to the reed switch **56**. When the magnet **54** comes close enough to the reed switch, corresponding to a water level, the reed switch sends an activation indication to the pump control electronics **58**.

Other water level detection method are contemplated. These include but are not limited to using a hall effect sensor, or a mechanical switch (not shown) to send activation indication to the water pump **32**.

The shower device **100** can include a sump screen **38**. The sump screen can be permanently glued to sump **40**-FIG. **5** or can be removable. The sump screen **38** includes a mesh **79** that has openings small enough to prevent bulk objects such as a bar of soap, band aids or a wash cloth from getting into the sump. A removable filter **36** can be included between the sump **40** and the sump screen **38**. The removable filter **36** has a finer mesh than the sump screen.

There are multiple ways to attach the removable filter **36**, such as with screws, two sided tape or to be weighted down. The preferred method of attachment is cage **92**-FIG. **5**, in which the removable filter **36** can be slid in and out without tools.

While the above description contains much specificity, these should not be construed as limitations on the scope of any embodiment, but as exemplifications of various embodiments thereof. Many other ramifications and variations are possible within the teachings of the various embodiments. For example the shower can be a stand up unit instead of a seated one. It is currently sized small enough to fit through the smallest standard, commercially available door. However, if the small door size is not an issue, then the shower could be made larger and roomier. Thus the scope should be determined by the appended claims and their legal equivalents, and not by the examples given.

OPERATIONAL EXAMPLE

In operation one embodiment of the portable shower is first configured for transportation. Batteries for the wash effluent pump are installed in a compartment in the side of the shower pan. If the float mechanism has been removed, the float is reinstalled in the basin or into the basin sump. The battery is then tested with a button that provides an indication that the battery has sufficient life and is properly installed. The battery indication can include a light that shows green if there is sufficient battery life and red if there is not sufficiently

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charged or improperly installed. No light would indicate that the battery is completely dead or improperly installed. The float is then tested by raising the float to an activation level simulating water in the basin. If the float and pump are working, then the sound of a running pump should be heard and the light on the front panel should light up.

Next a platform is placed in the basin and secured if necessary. If a shower seat is used with the shower, an attachable foldable seat is attached to the platform. The seat is stored folded for transportation. In this configuration, embodiment of the portable shower is ready for storage or transportation along with the shower poles and the shower curtain.

When ready to use the shower basin, the portable shower is carried or slid into proximity of a drain and hot and cold water source. The base is sized to slide so that it can be slid through a standardized door width of twenty eight inches. This allows for the use of the shower in restrooms at commercial facilities that have a sink and faucet but no shower facilities. However, to account for maneuvering the shower and potential interference with the door, the shower pan should be less than twenty five inches.

Next the poles are installed. The poles have a series of bends or directional changes in the same plane and thus flair out from the base when positioned into an extended position. Pole installation can occur before or after positioning the portable shower. The poles can be left installed when storing the shower or remove if easier for storage. Further, the poles can be used to help push and relocated the shower.

To install the poles, the pole end closest to the bends and with a slot cut into it is inserted into a round receptacle in the base. For this embodiment, the poles lock into two positions, an extended and a retracted position. In the retracted position, it is easier to install a shower curtain. Further, with the poles in the retracted position, it is easier to relocate the shower given that the poles extend out from the base when extended.

Next, a tapered curtain is attached between the poles. The curtain can have a pocket for sliding over the top of the pole, a hook, clasp, or snap to attach the widest part of the curtain to the top or side of the pole. Additional ties or clips along the height of the shower curtain are used to hold the shower curtain along the pole and thereby provide and provide a larger area within which to use the device. Curtain is installed by slipping each curtain pocket over each support pole. Shower head holder is installed on the pole closest to the source of hot and cold water. The shower head holder is attached to the selected pole with knob and imbedded nut of said pole. Shower head with clip is then attached to shower head holder by sliding the clip over both shower head arm rivets. Because the poles bend outward and the curtain is secured to the poles, a person showering has a larger showering space to move his arm and feel less claustrophobic.

Now the poles are rotated into an extended position which flairs or pulls the curtain taught. The vertical slot in the bottom of the pole drops over a horizontal pin located at the bottom of the pan pole receptacle.

Next, if the tube that is stored in a pan integrated storage compartment, it is pulled out. The discharge end of the tube, having a weight, is placed in the sink, drain, or to any area where the waste effluent is desired to be removed. The weight secures the hose from falling out of the sink either as a result of the weight of the hose or in reaction of the pressure of the ejected waste water effluent. The last step is to attach a hose between the sink faucet and the shower head and adjust the water temperature. The shower device **100** is now ready for testing. The water is turned on just long enough for accumulated water to cover the shower pan bottom. Float mechanism is manually activated by lifting float **46** until a full stream of

water is being pumped out of discharge hose, confirming that the shower is operational. Then, seat assembly and platform is placed in shower pan. The shower is now ready to be used.

Now the bather can enter the shower, through a closable opening in the shower curtain, and use the shower. As the wash effluent fills the bottom of the basin and sump, the float will rise. When the wash effluent level reaches a level, the magnet moves adjacent to the inside basin wall and adjacent to a reed switch located on the opposing side of the basin wall. Upon the switch closing, the pump will activate and the wash effluent will be pumped out of the basin and sump and into the sink. If for some reason the pump cannot keep up with the shower output, the water will rise to the top of the platform. This is an indication to the showing person that they should turn off the water at the shower head and give the pump time to remove the excess wash effluent.

Upon completing the shower, the shower head is turned off. The person can then access the faucet and turn off the water and disconnect the hose. The poles are disengaged from the locked extended position by lifting the pole and rotating to a retracted position. The slot in the bottom of the pole will again drop around the pin and lock the poles into the retracted position. This is repeated for all four poles. If needed, the shower is now in a configuration where it can be slid through a doorway and stored. Alternatively, it can be disassembled and easily transported to another place.

What is claimed:

1. A portable shower device comprising:

- a. a shower pan having a perimeter edge and a collection basin, configured to receive three or more curtain poles, wherein the pan is configured with a means for locking poles into an extended position;
- b. three or more curtain poles each pole having a pole top and pole bottom, configured to secure each of the pole bottoms to the shower pan and the means for locking to the pan in the first position, wherein the curtain poles have one or more bends such that when each pole is secured in the first position each of the pole tops extends beyond the perimeter edge, wherein each of the pole tops are not connected to another pole top;
- c. a tapered shower curtain coupled to the three or more curtain poles forming a substantially tubular shower curtain conduit shaped by the coupling between the tapered shower curtain and the three or more poles, wherein the tapered shower curtain has a first opening substantially perpendicular and adjacent to the shower pan and a top opening, wherein the first opening is substantially the area and shape of the shower pan, and wherein the tubular shower curtain top opening has an area at least 50% larger than first opening; and
- d. a closable opening, wherein the shower curtain has a curtain top, and a curtain bottom, and wherein the closable opening extends substantially vertically from the curtain top to the curtain bottom.

2. The device of claim 1 further comprising:

- a. a battery powered pump connected to the collection basin configured for removing washing effluent from the

collection basin, wherein the pump can pump effluent up a height at a pump flow rate;

- b. a pump control unit wherein the unit activates the pump upon receiving an activation indication.

3. The device of claim 2 further comprising a shower head coupled to a curtain pole having a shower flow rate, wherein the shower flow rate is less than or equal to the pump flow rate.

4. The device of claim 3 further comprising a sump connected beneath the shower basin wherein the pump is connected to the sump.

5. The device of claim 3 wherein the shower curtain is made of antimicrobial material and wherein the shower curtain is detachable from the poles.

6. The device of claim 3 wherein the width of the shower pan is less than 25 inches wide.

7. The device of claim 3 further comprising a platform configured to fit within the collection basin and configured to distribute weight on the platform to the perimeter of the collection basin and configured to let water pass through the platform and into the basin.

8. The device of claim 3 further comprising a seat removably coupled to the platform.

9. The device of claim 3 wherein the pan has a height of four to eight inches.

10. The device of claim 9, wherein the seat comprises a back panel, two side panels pivotally connected to the back panel, and a top panel, wherein the back panel two side panels pivotally connected to the back panel, and a top panel that can be supported by the two side panels, and wherein the seat is configured to fold flat within the basin when the two side panels and top panel is pivoted adjacent to the back panel.

11. The device of claim 4 further comprising a float mechanism coupled to one of the basin or the sump and having a means for communicating an activation indication to the pump control unit, wherein the float is configured to provide an activation indication when the water reaches a level.

12. The device of claim 11 wherein the means for communicating an activation indication is by a magnet that is moves into a position that activates a reed switch generating the activation indication.

13. The device of claim 12 further comprising a discharge hose connected to the pump on a first end and a securing means on the second end.

14. The device of claim 13 wherein the securing means is a weight connected to the second end.

15. The device of claim 6 wherein the float mechanism is slideably detachable and the magnet communicates with the reed switch through the basin wall.

16. The device of claim 15, wherein the float mechanism is comprised of a float and an arm wherein the float is coupled to one end of the arm.

17. The device of claim 15, wherein the seat is foldable.

18. The device of claim 7, further comprising a shower head holder.

19. The device of claim 18, wherein the shower head holder pivots in two directions.

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